

Roy Baria
Comments on IPCC Geothermal Paper
(via e-mail; received: 4 June 2008)

Dear Colleagues,

See the attached email below but to summarise it, I was invited at the Intergovernmental Panel on Climate Change (IPCC) meeting in Lubeck, Germany in January 2008 as a part of geothermal team to give opinion on the role of geothermal in the future (up to 2050). There were teams from other renewable sources including wind, PV, wave etc. I was in disagreement with the majority of the panel on Geothermal energy as they saw the hydrothermal as a major way forward. I do not think that hydrothermal can play a major part in addressing the climate change issues (CO2 reduction etc) and that it has to be much bigger resource and relatively widely available to the majority of the countries. Although hydrothermal is well founded technology it is very limited in availability. Using Enhanced Geothermal System or sometimes call Engineered Geothermal System is perhaps the only way forward from Geothermal point of view. Here we are considering power generation and large scale space heating. If we take for an example the MIT study which indicated a potential for the USA of around 100 GWe, and one accepts that it may be on the optimistic side, but the potential is there and like anything else, once the technological barriers are solved, the take up will accelerate.

I have no idea what the such estimate for the world as a whole would be, but using the land mass of USA as a template, which represents around 9,629,091 km² (6.5% of the world, 148,939,063km²) than scaling up this figure using US estimate, the world potential could be around 1547 GWe. Assuming that only 50% is viable, even this brings to a figure of around **800 GWe** which is significantly larger than the one mentioned in the paper. You need to see the fourth paragraph on page 6 of the paper. Additionally, very little is explained about the EGS technology and the current status.

This will be an important report for many governments and could influence their future strategy for renewable energy. It would be very helpful if you could read the enclosed paper and make you comments directly to Mike Mongillo, the secretary of IEA/GIA (mongillom@reap.org.nz). I strongly feel that EGS is underrepresented and this needs to be corrected before it is included in the IPCC final report. One avenue is through the IEA/GIA. Please forward this to anyone you feel can help. It will be useful if you can identify your organisation, your position in the company so that the credibility is established.

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